

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
 Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of

**KEY COMMUNICATIONS, LLC**

And

**KEYSTONE WIRELESS, LLC**

For Waiver of Deadlines for

Implementation of Phase II E911

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CC Docket No. 94-102

To: The Commission

**SUPPLEMENT TO PETITION FOR WAIVER OF DEADLINES  
 FOR IMPLEMENTATION OF PHASE II E911**

Key Communications, LLC ("Key") and Keystone Wireless, LLC ("Keystone") (collectively, "Petitioner-Small Carriers"), by their attorney and pursuant to the *Order to Stay*, FCC 03-241, released October 10, 2003 at ¶31, hereby supplement their pending Petition for Waiver of Deadlines for Implementation of Phase II E911 ("Waiver Petition") to provide additional supporting evidence in support of the Waiver Petition and to tailor the requested relief as suggested by the Commission in the *Order to Stay*.<sup>1</sup>

In this Supplement, the Petitioner-Small Carriers provide additional documentation respecting the status of their implementation of E911, the evolving and changing state of the technology, and how that changing state has caused their implementation plans to evolve as well. As shown herein, the Petitioner-Small Carriers have put into place a clear path to compliance in a timeframe consistent with the abilities of the rural PSAPs in their market areas to process E911

<sup>1</sup> Although the *Order to Stay* requested that carriers file supplements to their respective waiver requests within thirty days of the release date of that order, Petitioner-Small Carriers timely requested an additional thirty days, to and including December 10, 2003, within which to file their supplement. That extension request was not denied; accordingly, Petitioner-Small Carriers believe that this Supplement is timely submitted.

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information, and have narrowly tailored their requested waiver to that which is necessary and appropriate in the circumstances.

## **BACKGROUND**

This Commission has long recognized that rural and less densely populated areas are often not susceptible to network-based E911 solutions, and that in “contrast, handset-based solutions seem well-suited to rural areas.” *Third Report & Order in CC Docket No. 94-102*, 14 FCC Rcd. 17388, 17400 (1999). The Petitioner-Small Carriers are small, Tier III carriers (smaller than most Tier III carriers),<sup>2</sup> who precisely fit that description and who initially reported to the Commission that they would be adopting a handset-based solution. The Petitioner-Small Carriers elected to construct their wireless systems using GSM technology rather than TDMA, in part because they believed that because GSM (unlike TDMA) would not be phased out in major markets, GSM ALI handsets likely would be made commercially available much sooner than would TDMA ALI handsets. The Petitioner-Small Carriers believed (and continue to believe) that offering the best E911 technology can be a marketing device, and lead to higher subscriber penetration. Thus, they desire to have the best E911 technology available as soon as practicable.

As of the last filing that Petitioner-Small Carriers had made herein, they had been informed by Nokia, in a letter dated July 29, 2003, that there would be no GSM ALI-capable handsets forthcoming, now or in the foreseeable future.<sup>3</sup>

Following receipt of this unexpected and disturbing information, Petitioner-Small Carriers promptly began exploring other alternatives. This included determining what other

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<sup>2</sup> Their respective subscriber counts are contained in their separate material being submitted with a confidentiality request. See “Recent Developments” section, *infra*.

<sup>3</sup> A copy of this letter is provided again for the Commission’s convenience, as Exhibit 1 to this Supplement.

carriers were doing, corresponding with equipment vendors regarding potential network-based solutions, and of course, conversations with the PSAPs.

## **RECENT DEVELOPMENTS**

Petitioner-Small Carriers have now been advised that Nortel is developing a hybrid network/handset-based technology, which it calls "Timing Advance/Network Measurement Report" positioning ("TA/NMR"). Because the written documentation received from Nortel concerning TA/NMR is deemed by Nortel to be confidential and proprietary, Petitioner-Small Carriers are submitting this documentation simultaneously herewith, but under separate cover, along with a request for confidential treatment. Although the price quote received from Nortel (also contained within the confidential filing) is exceedingly high, Petitioner-Small Carriers are seeking funding to allow them to implement this solution, as it currently appears to be the only option.<sup>4</sup>

TA/NMR involves a two-step process. In the first step, a network-based solution is implemented, to enable greater ALI capability on the part of the carrier and the PSAP without resort to any special handsets. This interim solution is not fully Phase II compliant – Nortel

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<sup>4</sup> Petitioner-Small Carriers have inquired of Nortel as to the possibility of vendor financing, and are awaiting a response from Nortel. Petitioner-Small Carriers are also making inquiry of the various Public Safety organizations as to the possibility of obtaining government cost-recovery funding to cover all or at least a portion of the required expenditures.

Petitioner-Small Carriers remain optimistic that one or both of these potential funding sources will yield some funding to cover all or part of the cost of purchasing the TA/NMR infrastructure. They intend to file an interim report on or about January 15, 2004, which would include an update of the status of these funding requests. Only in the unlikely event that no such outside funding becomes available, Petitioner-Small Carriers would have to further supplement their Waiver Request to supply this Commission with their audited financial statements to corroborate their inability to cover all of the necessary funding internally, in which event the Petitioner-Small Carriers also would be seeking a further extension of time to meet the Phase II accuracy standards. However, at least for the present, Petitioner-Small Carriers remain hopeful that such will not become necessary.

states that it likely would meet the 300m portion of the Section 20.18(h) standard (although not necessarily 95% of the time, due to potential problems with cell site layout, distance of the mobile from the cells, and topography). Moreover, the network-based element of TA/NMR likely would not meet the 50m/67% portion of that standard. Stated otherwise, once the Petitioner-Small Carriers install and test this network-based element of TA/NMR, they would be providing a level of accuracy better than Phase I but short of Phase II, and thus would be materially enhancing public safety within the areas where local PSAPs have the capability to utilize such information.

To achieve the remainder of Phase II accuracy requirements (*i.e.*, 95% accuracy on 300m, 67% accuracy on 50m) would require the distribution and use of special “assisted-GPS” (“A-GPS”) handsets, which are not currently available. However, Petitioner-Small Carriers have been told in writing by Nortel as follows:

Small GSM market in U.S. in mid-late 1990s made it financially unviable for GSM handset developers to push for, and integrate, A-GPS [assisted GPS] capabilities for GSM

European and Asia Pacific operators now planning A-GPS rollout for location services

Trials continue in all market regions, including the U.S.

**A-GPS is seen as the preferred path to high accuracy across all air interface standards**

[pictures of A-GPS GSM handsets: Motorola A820, Motorola A835, Motorola A920 and Benefon Track Pro NT]

**A-GPS equipped handsets from other manufacturers, including at 850 [MHz], expected on the market in 4Q03-2H04 as A-GPS GSM trials are launched in U.S. and Europe<sup>5</sup>**

Petitioner-Small Carriers have been orally advised by Nortel that tests with A-GPS GSM handsets are indeed scheduled for the first quarter of 2004 with one or more Tier I carriers, and

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<sup>5</sup> See Confidential Nortel Brochure, *Options for E911 Phase 2*, dated October 1, 2003, at pp.14-15 (included in materials submitted under separate cover).

that if those tests succeed, such handsets could begin to be commercially available to small Tier III carriers such as the Petitioner-Small Carriers by the fourth quarter of 2004. Obviously, Petitioner-Small Carriers have no way of knowing whether that timetable will remain in place, or what quantities would be available in any particular time frame.

### **PSAP READINESS**

Petitioner-Small Carriers have been in dialogue with the PSAPs in their respective market areas. Each PSAP has been informed of the plan to implement the TA/NMR solution, and that the network-based solution would not provide accuracy more precise than 300 meters. None of the PSAPs has complained about this situation, as each of the PSAPs appears to understand the problems facing carriers in low-density areas such as these, and as none of these PSAPs has yet implemented Phase II E911 itself. The only Phase II E911 request received by either of the Petitioner-Small Carriers which is more than two weeks old is from Cabell County, West Virginia. However, according to the latest information provided to Key by the Cabell County PSAP coordinator, Ms. Shirley Lawson, Cabell County will not be capable of processing Phase II information until some time during the first quarter of 2004. Cabell County is allowing Key until July, 2004 to implement a Phase II solution, and has not indicated concern that only the network-based portion of TA/NMR is possible of implementation by then.

Stated otherwise, the relations between Petitioner-Small Carriers and their PSAPs are excellent, none of the PSAPs has yet implemented Phase II E911, and the PSAPs are currently satisfied with the proposed implementation schedule, despite the absence of any certainty on the timing of implementation of the assisted-GPS handset portion of the overall compliance plan.

### **REVISED WAIVER REQUEST**

In light of these new developments, and in an effort to narrowly tailor the relief sought as directed by the Commission in the *Order to Stay, supra*, Petitioner-Small Carriers are hereby revising their requested relief. Specifically, Petitioner-Small Carriers now request the following relief:

- A stay of the accuracy thresholds of Section 20.18(h) until the later of December 31, 2006, or twelve months from receipt of a valid Phase II E911 request; and
- An extension of the deadlines set forth in Section 20.18(g)(1) of the Commission's Rules as follows: (g)(1)(i) = October 31, 2004; (g)(1)(ii) = December 31, 2004; (g)(1)(iii) = April 30, 2005; (g)(1)(iv) = October 31, 2005; and (g)(1)(v) = December 31, 2006.

Petitioner-Small Carriers would also expect that they be required to submit interim quarterly reports concerning their progress, as a condition to maintaining their relief. However, if, as has happened in the past, it develops that the promises made by the equipment vendors are not kept, and due to causes beyond their control (for example, the handset manufacturers refusing to sell to small Tier III carriers because all capacity is demanded by the big Tier I carriers) they are unable to meet some portions of the above revised timetable, and if such causes are documented in future interim reports, Petitioner-Small Carriers would request the right to seek concomitant adjustments to the E911 waiver relief afforded.

### **CONCLUSION**

Petitioner-Small Carriers remain committed to implementing Phase II E911 capability as quickly as practicable, and to exploring different mechanisms for doing so with a view to implementation sooner rather than later. Petitioner-Small Carriers would be completely compliant today, if the promises made by equipment vendors in 1999 regarding handset-based GSM E911 solutions had been true, and such handsets had been made available wholesale to

Petitioner-Small Carriers in a timely fashion. Adapting to the changing technological landscape, Petitioner-Small Carriers are tentatively planning to move from a handset-based solution to a hybrid-based approach, due to their desire to be innovators and leaders in the realm of subscriber safety.

Petitioner-Small Carriers have an excellent relationship with their PSAP communities, and are providing Phase I E911 service wherever local PSAPs are able to process Phase I at this time. None of those PSAPs is ready for Phase II as of today, and none is expected to be ready before some time next year. Patently, the PSAPs are recognizing that it is a physical impossibility for the Petitioner-Small Carriers to have implemented any Phase II E911 solution by now, especially any handset-based solution. The proposed timetable will be sufficient under the circumstances. Accordingly, the public interest is best served by granting the narrowly-tailored relief requested herein.

Respectfully submitted,  
**KEY COMMUNICATIONS, LLC and**  
**KEYSTONE WIRELESS, LLC**

December 10, 2003

By:   
David J. Kaufman, Their Attorney

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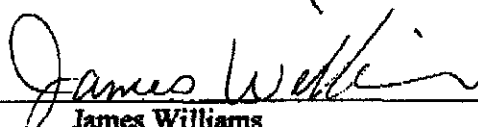
## DECLARATION OF JAMES WILLIAMS

James Williams hereby states, under penalty of perjury, as follows:

1. My name is James Williams. I am the E911/CALEA Liaison Officer for each of Key Communications, LLC and Keystone Wireless, LLC (collectively, the "Petitioner-Small-Carriers"). The Petitioner-Small-Carriers are small carriers who employ me on a collective basis to be responsible for compliance with E911 and CALEA requirements.

2. I have reviewed the Petitioner-Small-Carriers' "SUPPLEMENT TO PETITION FOR WAIVER OF DEADLINES FOR IMPLEMENTATION OF PHASE II E911" ("Supplement"). All facts set forth in the Petition are true and correct, to the best of my knowledge, information and belief.

Executed December 10, 2003.

  
James Williams



**EXHIBIT 1 to**  
**“Supplement to Petition for Waiver of Deadlines**  
**for Implementation of Phase II E911” filed by**  
**Key Communications, LLC and**  
**Keystone Wireless, LLC**  
**December 10, 2003**

**Subject:** E911  
**From:** <tommy.carter@nokia.com>  
**Date:** Tue, 29 Jul 2003 11:58:55 -0400  
**To:** <bwilson@pcmgt.com>

Bob,

Per our conversation this morning, I wanted to make sure you understood that Nokia has no handset in it's current GSM portfolio that supports GPS for E911. I would be very surprised if any manufacturer had such a handset. Furthermore, to my knowledge, Nokia has no plans to produce such a handset for GSM and I would be very surprised if any other manufacturer had such a handset on the drawing board for GSM.

I hope this information helps you in your research.

Sincerely,

Tommy Carter  
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